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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/864,836
Filing Date: May 24, 2001
Appellant(s): ISHIKAWA, HIDEYUKI

**MAILED
MAY 14 2007
GROUP 3700**

Mr. Michael Gzybowski
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1-29-07 appealing from the Office action mailed 12-22-05.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is incorrect.

The amendments after final rejection filed on 2-22-06, 4-24-06 and 6-7-06 have not been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is deficient. 37 CFR 41.37(c)(1)(v) requires the summary of claimed subject matter to include: (1) a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number, and to the drawing, if any, by reference characters and (2) for each independent claim involved in the appeal and for each dependent claim argued separately, every means plus function and step plus function as permitted by 35 U.S.C. 112, sixth paragraph, must be identified and the structure, material, or acts described in the specification as corresponding to each claimed function must be set forth with reference to the specification by page and line number, and to the drawing, if any, by reference characters. The brief is deficient because the numerals and Figure numbers referred to are not all complete/accurate and some of the cited portions do not teach the claimed subject matter as set forth.

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A corrected Summary follows:

The present invention as set forth in the appended claims is directed to a disposable diaper that includes an elastically stretchable covering member 3 (shown in Fig. 1), 40 (shown in Fig. 6 and discussed in detail in the paragraph bridging pages 14 and 15 of Appellant's original specification) for covering a diaper wearer's crotch region 8 (Fig. 1), 48 (Fig. 6) and front and rear waist regions, 46, 47 (Fig. 6), 6, 7 (Fig. 1). The disposable diaper further includes a liquid-pervious sheet 2 (Fig. 1), 42 (shown in Fig. 6 and discussed in detail in the paragraph bridging pages 14 and 15 of appellant's original specification), the liquid-pervious sheet 2, 42 having a skin contactable surface for contacting with skin of the diaper wearer. The disposable diaper further includes a liquid-absorbent core member 4 (Fig. 1) 44 (Fig. 6) sandwiched between the liquid-pervious sheet 2, 42 and the covering member 3 (Fig. 1), 40 (as shown in Fig. 7 and discussed in the paragraph bridging pages 14 and 15 of appellant's original specification). Discrete elastic members 17 (Fig. 1), 57 (Figs. 6 and 7) are provided along transverse side edges of the diaper to extend circumferentially along leg-openings that are defined when the diaper is put on the diaper wearer. The covering member (3, Fig. 2) 40 consists of an elastically stretchable first layer 40a (3a, Fig. 2) and an inelastically stretchable second layer 40b (3b, Fig. 2) shown in Fig. 7. As shown in Figs. 4A and 4B and discussed in the paragraph bridging pages 9 and 10 of appellant's original specification, the inelastically stretchable second layer 3b (40a, Fig. 7) is formed of a plurality of continuous fibers 20 which continuous fibers are fixed to the elastically stretchable first layer 3a (40a, Fig. 7)) in bonding zones 21 spaced apart from each other so that a ratio of $L1/D1$, where $L1$ is a length of the continuous fibers extending between a first

pair of the bonding zones in a first zone on the covering member and $D1$ is a distance in a straight line between the first pair of bonding zones in the first zone of the covering member is larger than a ratio of $L2/D2$, where $L2$ is a length of the continuous fibers extending between a second pair of the bonding zones in a second zone on the covering member and $D2$ is a distance in a straight line between the second pair of bonding zones in the second zone of the covering member (the first and second zones (or ranges) "A" and "B" are shown in Figs. 3 and 7). The stretchability of the first and second zones (or ranges) A and B allows the covering member 3, 40 to more easily stretch in a direction away from the skin contactable surface in the first zone (or range) A than in the remaining zone of the covering member 3, 40. As shown in Figs 2 and 7, the first zone (or range) A is adjacent the liquid-absorbent core member 4, 44 and at least substantially coextensive with the liquid-absorbent core member 4, 44, so that pressure exerted on the covering member 40 by the liquid-absorbent core member will stretch the first zone (or range) A in a direction (see Ground 1, *infra*) without exerting any pressure on the discrete elastic members.

The elastically stretchable first zone is in a transverse middle zone of the diaper as shown in Figs. 2 and 7 and is formed of an elastically stretchable film as discussed in the paragraph bridging pages 14 and 15 of appellant's original specification.

The continuous fibers of the inelastically stretchable second layer 3b (40b) are made of polypropylene as discussed in the paragraph bridging pages 8 and 9 of appellant's original specification.

The elastically stretchable first layer 3a (40a) is formed from a liquid-impervious sheet and lies inside the second layer as shown in Figs. 2 and 7.

The elastically stretchable first layer 3a (40a) is formed from a liquid-impervious sheet and lies inside the inelastically stretchable second layer 3b (40b) so that the elastically stretchable first layer functions as a liquid-impervious backsheet for the liquid-absorbent core member as shown in Figs. 2 and 7.

The continuous fibers of the inelastically stretchable second layer 3b (40b) are made of propylene copolymers as discussed in the paragraph bridging pages 8 and 9 of appellant's original specification.

The first zone (or range) A is a transverse middle zone of said diaper as discussed on page 7, lines 1-4 of appellant's original specification.

The elastically stretchable first layer 3a (40a) is formed of an elastically stretchable film as set forth in original claim 3. The continuous fibers 20 of said inelastically stretchable second layer 3b (40b) are made of polypropylene as discussed on page 8, lines 17-18 of appellant's original specification.

The elastically stretchable first layer 3a (40a) is formed from a liquid-impervious sheet and lies inside said second layer 3b (40b) as discussed on page 6, lines 8-18 and shown in Fig. 4.

Moreover, the elastically stretchable first layer 3a (40a) is formed from a liquid-impervious sheet and lies inside said inelastically stretchable second layer 3b (40b) so that said elastically stretchable first layer 3a (40a) functions as a liquid-impervious backsheet for said liquid-absorbent core member as discussed on page 6, lines 8-18 and shown in Fig. 4.

The elastically stretchable first layer 3a (40a) is formed of a nonwoven fabric made of crimped fibers as set forth in original claim 3.

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The continuous fibers of said inelastically stretchable second layer 3b (40b) are made of propylene copolymers as discussed on page 8, lines 17-18 of appellant's original specification.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows: The grounds for rejection of claims 1-3 are incomplete/incorrect. The correct grounds are: 2) Whether claims 1-3 are anticipated by Divo et al alone under 36 U.S.C. 102(b) or, in the alternative, obvious over Divo et al, EP '714, in view of Serbiak et al, '232, and Morman et al, '760 under 35 U.S.C. 103(a).

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

0 650 714	DIVO et al. (EPO)	05-1995
5,846,232	SERBIAK et al	12-1998
4,655,760	MORMAN et al	04-1987
5,853,881	ESTEY et al	12-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Ground 1:

Claims 1-6 and 8-9 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

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art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The last three lines of claim 1 claim the exact opposite of what is originally described, i.e. claims stretching toward the skin contactable surface rather than away therefrom, see the 10-7-05 substitute specification at the paragraph bridging pages 5-6 and the first sentence on page 8 as well as the Figures referred to thereby, i.e. where is the original support for the invention as is now claimed? Any traversal should include specific reference to the specific page and line number where such support is presented. Also note MPEP 2163.06, I, first paragraph.

Ground 2:

Claims 1-3 are rejected under 36 U.S.C. 102(b) as anticipated by Divo et al, EP '714, alone, or, in the alternative, under 35 U.S.C. 103(a) as obvious over Divo et al, EP '714, in view of Serbiak et al, '232, and Morman et al, '760.

Claims 1-3: See Figures 1-4, 6, 9-13, col. 6, lines 31-39, i.e. portion(s) selectively "activated" while other remaining or second portion(s) remain unactivated, col. 1, lines 3-16, col. 3, lines 52-55 (it is noted "elongation as defined by the dictionary means "stretched out, lengthened), col. 8, line 6-col. 9, line 6 (Note definition of "nonwoven" in Materials Handbook provided in a previous Office Action), col. 9, line 19-col. 10, line 19, col. 11, lines 20-46, col. 12, line 20-col. 13, line 5, col. 14, lines 28-30, col. 15, line 42 -col. 16, line 4, i.e. the cover is 26, the pervious sheet is 24, the core is 28, the elastic members are 32, the first layer is 5 or 11, the second layer is 3 or 7 and 15. The portions cited supra, especially Figures 2-3, col. 3, lines 52-55, col. 11, lines 20-46, and col. 6, lines 31-39 disclose the ratio set forth on lines 11-19 of claim 1, i.e. teach the nonwoven, i.e. continuous fibers, are activated in a first zone, e.g. the continuous

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fibers are longer between bonding points due to gathering, and not activated in a remaining or second zone, i.e. the continuous fibers are shorter between bonding points because not gathered.

It is the Examiner's first position that col. 6, lines 31-39 also teach the structure of lines 20-22 of claim 1 and claim 2. Lines 19-20 and 22 et seq of claim 1 recite function or capability of the claimed structure. The Divo device includes the same structure, see cited portions above.

Therefore there is sufficient factual basis to conclude that the function or capability of the claimed structure is also inherent in the same structure of Divo. See MPEP 2112.01. In any case, i.e. the Examiner's second position, Divo, at the very least, teaches providing elasticity to a backsheet consisting of the composite elastic member wherein only parts of the composite are activated or extensible while others are not. Serbiak et al and Morman et al teach, see Figures thereof, it is known in the diaper art to provide elasticity to a backsheet consisting of a composite elastic member wherein only the transverse middle zone part is extensible while the remainder is not. Such structure is for the purposes of better fit and comfort, see abstract of Morman and col. 12, lines 31-32 of Serbiak et al. It is also noted that Serbiak et al also teaches such can be combined with elastic members or not, see col. 12, line 26-28 thereof. Therefore to make the part of the composite which is activated or extensible only the transverse middle portion of the backsheet as taught by Serbiak et al and Morman et al on the Divo et al device would be obvious to one of ordinary skill in the art in view of the recognition that such would provide a backsheet where only a portion is activated while the remainder is not as desired by Divo et al.

Furthermore, such a feature would provide good fit as well as comfort and good fit is desirable in any diaper because otherwise it does not contain fluid. Lines 19-20 and 22 et seq of claim 1 recite function or capability of the claimed structure. The prior art combination teaches the same

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structure, see cited portions above. Therefore, there is clear and convincing evidence that the claim's functional or characteristic recitation necessarily flows and/or is inevitably present in the teachings of the prior art of record.

Ground 3:

Claims 4 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Divo et al, EP '714, alone, or Divo et al, EP '714, Serbiak et al, '232, and Morman et al, '760, further in view of Estey et al.

Appellant claims the elastic layer being formed of nonwoven material made of crimped fibers and the second layer made of polypropylene or propylene copolymers. Divo et al only disclose the elastic layer as being elastic films or nonwovens, see col. 8, lines 16-18 and col. 10, line 16 and the second layer being nonwovens of polyethylene, see col. 8, lines 13-15 and col. 10, lines 5-7, respectively. However, see Estey et al col. 1, lines 6-9, col. 6, lines 47-49, col. 16, lines 24-26, col. 8, lines 36-46 and col. 9, lines 22-26, i.e. in the diaper art, in elastic composites, the interchangeability of elastic films and nonwovens of noncrimped fibers with elastic nonwoven webs of crimped fibers and the interchangeability of polyethylene nonwoven nonelastic for polypropylene or propylene copolymer nonelastic nonwovens. To make the elastic film or nonwoven of noncrimped fibers of Divo et al a nonwoven material made of crimped fibers instead and to make the second layer of Divo et al as claimed instead would be obvious to one of ordinary skill in the art in view of the interchangeability as taught by Estey et al.

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Ground 4:

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Divo et al, EP '714, in view of Serbiak et al, '232, and Morman et al, '760.

Appellant claims the elastic layer being formed of a liquid impervious sheet which lies inside the second layer. Divo et al only discloses such elastic layer as being elastic films or nonwovens and coextensive with the second layer initially and the desire that the backsheet be liquid impervious and have a clothlike appearance, see cited portions supra. However, see Serbiak et al at Figure 2, col. 6, lines 44 et seq, col. 7, lines 18-20 and col. 2, lines 42-47, i.e. in the diaper art, in elastic composites, the interchangeability of elastic pervious films and elastic impervious films. To make the elastic film of Divo et al a fluid impervious elastic film instead would be obvious to one of ordinary skill in the art in view of the interchangeability as taught by Serbiak et al. It would also provide the imperviousness of the backsheet as desired by Divo et al. Additionally to make the elastic layer the innermost of the two layers as taught by Serbiak et al on the Divo et al device would be obvious to one of ordinary skill in the art as providing a more clothlike appearance as desired by Divo et al. The last two lines of claim 6 recite function or capability of the claimed structure. The prior art combination teaches the same structure, see cited portions above. Therefore, there is clear and convincing evidence that the claim's functional or characteristic recitation necessarily flows and/or is inevitably present in the teachings of the prior art of record.

10) Response to Argument

Ground 1:

Appellant's arguments on page 7 have been considered but are deemed not persuasive in that such are narrower than the claim language, e.g. the claim language argued, i.e. "in said direction away from the skin contactable surface", is not the same as that of claim 1, last three lines, i.e. "in said direction of the skin contactable surface", and the prosecution history, i.e. the claims have not been amended as argued (It is noted that the arguments/recreation of Figure 2 supports the Examiner's position with respect to lack of support for the claim language of claim 1, last three lines).

Therefore, the rejection of claims 1-6 and 8-9 under 35 USC 112, first paragraph, is deemed proper and maintained.

Ground 2:

Appellant's arguments with respect to the teachings of Divo alone on page 8, line 1-page 11, line 2 have been considered but are deemed not persuasive since the claim limitation argued is not the same as the claim language of claim 1 similar to the arguments set forth with regard to Ground 1, see discussion supra. Appellant's arguments on page 11, line 3-page 14, line 9 with respect to the combination of Divo, Serbiak and Morman have also been considered but are deemed not persuasive not only for the same reasons set forth supra, i.e. not consistent with the claim language, but also because such are narrower than the teachings of the art, i.e. see, e.g.,

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Serbiak at claim 1, section (a) and col. 12, lines 55-59 and col. 8, lines 17-31, col. 10, lines 16-37 and Figures 1 and 7 and Morman at col. 8, lines 43-46, e.g. stretchability in a direction other than the transverse direction or lack of bonding to the absorbent member. Appellant's remarks on page 14, lines 10-17 have been noted but are deemed not persuasive because they are narrower than the prior art rejection.

Therefore the rejection of claims 1-3 under 36 U.S.C. 102(b) as anticipated by Divo et al, EP '714, alone, or, in the alternative, under 35 U.S.C. 103(a) as obvious over Divo et al, EP '714, in view of Serbiak et al, '232, and Morman et al, '760 is deemed proper and maintained.

Ground 3:

Appellant's remarks on pages 14-16 have been considered but are deemed not persuasive because such are not consistent with/narrower than the prior art rejections, i.e. the prior art rejection does not substitute the crimped fibers of Estey for crimped fibers of Divo.

Therefore the rejection of claims 4 and 8-9 under 35 U.S.C. 103(a) as being unpatentable over Divo et al, EP '714, alone, or Divo et al, EP '714, in view of Serbiak et al, '232, and Morman et al, '760, further in view of Estey et al is deemed proper and maintained.

Ground 4:

Appellant's arguments on pages 16-17 have been considered but are deemed not persuasive because not only are they not consistent with the prior art rejection but also narrower than the teachings of the prior art and the language of the claims. Claim 1 requires a disposable diaper not a sanitary napkin. Divo teaches an elastic layer for use in a cover/backsheet layer in a

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disposable diaper and that such cover/backsheet layer should be liquid impervious and have a clothlike appearance, see, e.g., col. 14, lines 40-53 and the prior art combination is directed to cover layers of diapers, not napkins.

Therefore the rejection of claims 5-6 under 35 U.S.C. 103(a) as being unpatentable over Divo et al, EP '714, in view of Serbiak et al, '232, and Morman et al, '760 is deemed proper and maintained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

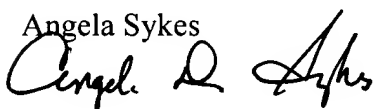
Respectfully submitted,

K. M. Reichle



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